# **Chapter 3. Objectives**

## Introduction

Objectives are measureable and time-specific outcomes or accomplishments that contribute to maintaining or trending toward desired conditions during the planning period. They represent proposed projects or activities intended to be accomplished. While objectives are not considered to be targets, they should be feasible and set the priorities for the planning period. If an objective is no longer appropriate or relevant to achieving desired conditions, the responsible official may determine that a plan amendment or revision is necessary to remove or replace that objective. Objectives are not required for every desired condition; however, every objective relates to a desired condition. Desired conditions that are linked to each objective are shown in parentheses following each objective statement. Objectives provide the strategy for trending toward desired conditions and are expected to be realistic; however, accomplishment of objectives can be influenced by ecological events, current staffing levels, climatic conditions, and anticipated near-term budgets.

Objectives are also closely related to the monitoring strategy described in chapter 6 of this plan. Questions we ask ourselves in that strategy include, "Did we accomplish the objective?" and "Did that accomplishment create the outcomes we desired, that is, trending toward forestwide or management area desired conditions?"

The objectives (plan decisions) below are the numbered statements displayed in boxes. The information outside of these boxes are not plan decisions but are examples, estimates, or additional detail to help understand the intent of the objective.

# Vegetation

Vegetation in the plan is organized by potential natural vegetation type (PNVT). PNVTs are coarse-scale units of land that share similar climate components, soil types, vegetation, and natural disturbances. Map 1 in appendix A shows where the various PNVTs are found across the planning area. The vegetation need for change statement reads as follows: "Restore vegetation structure and composition and desired characteristics of fire to selected ecosystems, while responding to citizen concerns related to smoke emissions." The following objectives (Obj-1 through Obj-6) and associated desired conditions (chapter 2), and standards and guidelines (chapter 4) for vegetation are intended to respond to that need for change.

Obj-1

Within the Semi-Desert Grassland PNVT, allow or introduce 25,000 to 65,000 acres of wildland fire (planned and unplanned ignitions) during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Airshed-1</u>, <u>DC-Veg-1</u>, <u>DC-Veg-21</u>, <u>DC-Wildlife-1</u>)

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- There are approximately 126,000 acres in this PNVT. The treatments could affect 12 to 67 percent of the PNVT over a 10-year period. Encroachment by trees and shrubs is taking place within this PNVT due to past fire suppression. While "natural" fire frequency is estimated at once every 2 to 10 years, current fire frequency averages once

- every 94 years in this PNVT. Benefits of increasing the frequency of fire disturbance include inhibition of woody species and certain types of nonnative invasive plant species.
- It may be more beneficial to use prescribed fire (as opposed to managed wildfire) along with pretreatment of nonnative invasive species to provide a natural disturbance agent with fewer risks of nonnative plant species invasion and fewer unintended impacts to fences and pastures.
- Accomplishing this objective is expected to provide benefit to pronghorn in most locations and may lead to meeting the intent of objectives 26 and 27 as well as this objective.
- The wide range in acreage to be accomplished reflects uncertainty in being able to time prescribed fires so that: (1) precipitation is adequate to encourage grass recovery and restore ground cover for inhibition of invasive species, (2) prefire preparation is done to avoid spread of nonnative invasive plant species, and (3) coordination with grazing permittees leads to desired fuel levels and understanding on needs for fence protection or postfire fence repair.

Within Great Basin Grasslands PNVT, allow or introduce 1,000 to 5,000 acres of wildland fire (planned and unplanned ignitions) during the 10 years following plan approval. (<u>DC-Airshed-1</u>, <u>DC-Veg-1</u>, <u>DC-Veg-21</u>, <u>DC-Wildlife-1</u>)

#### **Background and Rationale**

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- Approximately 38,000 acres has been classified as Great Basin Grasslands on the Prescott NF. Historically, frequent (10 to 30 years) high severity fires maintained these open grasslands dominated by perennial bunchgrasses, forbs, and few shrubs. Current vegetation species and arrangement is generally at desired levels. The amount of activity stated in the objective reflects the need to maintain that situation using fire.
- Accomplishing this objective is expected to provide benefit to pronghorn in most locations and may lead to meeting the intent of objectives 26 and 27 as well as this objective.
- Because portions of this PNVT fall within the checkerboard area of the Prescott NF, the
  intermixture of national forest and non-Federal ownership could limit the size of
  treatment areas.

Obj-3

Treat 20,000 to 90,000 acres in Juniper Grasslands, Piñon-Juniper Evergreen Shrub, and Piñon-Juniper Woodlands PNVTs using mechanical treatments, wildland fire (planned and unplanned ignitions), or browsing by domestic livestock to improve watershed and rangeland conditions, vegetation structure, and wildlife habitat during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Veg-1 to 7, DC-Veg-9, DC-Wildlife-1, DC-Watershed-1, DC-Watershed-3)

#### **Background and Rationale**

• Juniper Grasslands and Piñon-Juniper Evergreen Shrub PNVTs tend to be highly intermixed, especially where there is an elevation gradient. Therefore, the two PNVTs

- were combined in the objective. Piñon-Juniper Woodlands PNVT was included in this objective to respond to needs for wildlife habitat improvement.
- Using gross acreage from terrestrial ecosystem units, treatment would range from 3 to 16
  percent of the total area classified as juniper grasslands, piñon-juniper evergreen shrub,
  and piñon-juniper woodlands.
- Evidence of erosion has increased in some areas due to less herbaceous ground cover. Lack of herbaceous ground cover can also decrease infiltration of water into the soil.
- Within the Piñon-Juniper Evergreen Shrub PNVT, increasing density of juniper trees and shrubs leads to increased competition for water, especially if climate predictions of warmer and drier conditions take place. By removing some trees or shrubs, the remaining vegetation would have less competition for water and better survival. In some locations, depending on site conditions, herbaceous ground cover may expand.
- Within the juniper grasslands, past fire suppression has allowed encroachment of juniper trees. Reintroducing fire as a disturbance will increase the vigor of grasses and will kill some trees and bushes. Mechanical tree removal will decrease density of juniper trees in locations where fire is not desired or will not carry. The result will be healthier grasslands and enhanced pronghorn habitat including the creation of a more open environment, a trend toward fewer trees and shrubs, and maintenance of the desired open environment within relevant Arizona Game and Fish Department linkages.
- Meeting this objective is expected to provide benefit to pronghorn in many locations and may lead to accomplishment of objectives 26 and 27, as well as this objective.
- Natural fire would be expected to occur once in 30 years within juniper grasslands and once in 60 years within piñon-juniper evergreen shrub. The wide range of acreage to be treated in this objective is based on uncertainty of being able to get fire to spread in these PNVTs, given reduced coverage of herbaceous ground cover. Mechanical treatments could vary due to uncertainties in demand for biomass. A third source of uncertainty includes projected warmer and drier temperatures along with more intense precipitation activity during the summer season. The net effect would be more runoff and less effective water infiltration due to precipitation intensity. If juniper or woody plant encroachment in grasslands increases as a result of response to changing climate conditions, juniper removal might be effective only in the short term.

Use 40,000 to 100,000 acres of wildland fire (planned and unplanned ignitions), mechanical treatments, or domestic goats to maintain current conditions in the Interior Chaparral PNVT during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Airshed-1</u>, <u>DC-Veg-1</u>, <u>DC-Veg-3</u>, <u>DC-Veg-11 to 12</u>)

## **Background and Rationale**

• Treatments in interior chaparral are designed to maintain this fire-adapted system (fire frequency in any one location of once every 35 to 100 years) and to protect communities at the wildland-urban interface. While the objective acreage figures predict that up to 30 percent of the PNVT could be treated, many of these activities would take place near wildland-urban interface areas such as in the vicinity of Cherry, Crown King, or within the Hassayampa River watershed. Desired conditions (DC-Veg-12) allow for shortened fire return intervals in such areas.

- Mechanical treatments were included with the fire acreage to allow response to the
  possible demand for biomass and to allow treatment near structures at the wildland-urban
  interface.
- If projected warmer and drier conditions do occur, timing of prescribed fire treatments could be adjusted to later fall and winter to find time periods when fuel moistures are such that fires can be controlled, safety goals can be met, and management objectives can be achieved.

Thin or harvest 2,500 to 8,000 acres and introduce or allow 25,000 to 50,000 acres of wildland fire (planned and unplanned ignitions) in Ponderosa Pine-Evergreen Oak and Ponderosa Pine-Gambel Oak PNVTs during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Airshed-1, DC-Veg-1 to 2, DC-Veg-13 to 20, DC-Wildlife-1)

## **Background and Rationale**

- Northern goshawks are the management indicator species (MIS) associated with the ponderosa pine PNVTs. This objective will improve habitat for this MIS.
- The ponderosa pine PNVTs (Ponderosa Pine-Gambel Oak and Ponderosa Pine-Evergreen Oak) were combined for this objective because they have similar unnatural structural characteristics due to past wildland fire suppression. These characteristics include an increase in young forest with dense canopy cover as well as older forest with dense canopy cover. Both PNVTs have "natural" fire frequencies of every 6 to 15 years.
- Multiple treatments in the same locations could be carried out, especially at the wildlandurban interface near Prescott and on Mingus Mountain. An example might be thinning and then burning on the same site.
- Dense young and mid-age forests with more than 30 percent tree canopy cover predominate in these PNVTs. This is due to several factors, but is primarily attributed to past fire suppression. The density of trees leads to uncharacteristic crown fires when wildfires do occur. This type of fire is unnaturally severe, can burn so intensely that postfire natural conifer regeneration is delayed, and can threaten lives and property.
- The relatively low number of acres shown for mechanical treatment is due to limitations such as steep slopes, lack of access, and fewer acres that are suitable for timber harvest. If a demand for biomass increased, it is possible that the acreage of mechanical treatments of small woody vegetation could increase, however, slopes and access limitations could still prevent large scale mechanical treatments. Mechanical treatments could be emphasized in the vicinity of Prescott to decrease smoke impacts.

Obj-6

Use treatment methods to control or eradicate at least 75 to 95 percent of nonnative invasive plant species populations within 1 to 2 years of identification during the 10 years following plan approval. (<u>DC-Veg-1</u>, <u>DC-Veg-4</u>, <u>DC-Veg-5</u>)

## **Background and Rationale**

With the future possibility of warmer, drier climatic conditions; and with the Prescott National Forest location in a transitional elevation between warm desert and the Mogollon Rim, it is likely that higher numbers of nonnative invasive species will begin to be found in the area. • The 1 to 2-year period between location and treatment allows for treating plants at the stage of their development where methods used can be most effective and allows for doing environmental analysis related to treatment methods. If the opportunity arises to do treatments sooner than 1 to 2 years, this objective should not be viewed as a reason to delay.

#### Recreation

The recreation need for change statement reads as follows: "Provide sustainable and diverse recreation opportunities that consider population demographic characteristics, reflect desires of local communities, avoid overcrowding and user conflicts, and minimize resource damage." The following objectives (Obj-7 through Obj-17), as well as related desired conditions (chapter 2) and standards and guidelines (chapter 4) for recreation, transportation, wilderness, and wild/scenic rivers are intended to respond to that need for change.

Obj-7

Add 2 to 5 developed recreation areas during the 10 years following plan approval. (DC-Rec-1, DC-Wild and Scenic-1)

## **Background and Rationale**

- The upper Verde River is eligible for wild and scenic river designation. Motorized access is limited, due to past decisions related to protection of threatened and endangered species habitat. People want to get to the river, but some users find the designated access points along the river to be unacceptable due to trash and human waste. This can lead to people driving down to the river illegally in order to bring their families to a less spoiled portion of the river, or to enjoy the challenge of finding a way to get there.
- The Prescott NF proposes to develop campgrounds and other recreation sites where conditions are clean, sanitary, and can be legally accessed. Possible locations could include the vicinity of Bear Siding, Perkinsville Bridge, Forest Road 638, or Camp Wood. Such development could provide a desired recreation opportunity as well as a Forest Service presence to discourage illegal activity.
- There may be an opportunity to coordinate with the Verde River communities and add developed recreation sites in a location within the Verde Valley.

Obj-8

Create up to 4 designated dispersed camping areas during the 10 years following plan approval. (DC-Rec-1, DC-Watershed-2, DC-Watershed-6)

- In the absence of specific restrictions, a person can camp in any location on the forest outside of a developed recreation site; this is often called dispersed camping. However, the number of suitable camping spots can be limited by steep slopes, uninviting vegetation, distance to water, and lack of access. Desirable spots are usually occupied during weekends and holiday periods, and more often if they are near water. This high level of use can lead to soil compaction, trampling of ground vegetation, and unplanned site expansion.
- In an effort to decrease the extent of resource impacts, the Prescott NF proposes to manage dispersed camping in certain areas by designating specific dispersed campsites that would have fewer amenities than developed campgrounds. Following the model

- established within the Prescott Basin, the Prescott NF now wants to designate dispersed camping in other areas to prevent further damage and to restore natural vegetation.
- Designated dispersed camping would be located in areas where resource impacts could be minimized; possible locations could include selected areas near Crown King, on Mingus Mountain, Camp Wood, the upper Verde River, or in the vicinity of Yellow Jacket Creek.

Reduce the backlog of needed maintenance (i.e., <u>deferred maintenance</u>) by 80 to 90 percent for developed sites and 50 to 75 percent for trails during the 10 years following plan approval.(<u>DC-Rec-1</u>, <u>DC-Rec-2-Trails</u>, <u>DC-Transportation and Facilities-1</u>)

## **Background and Rationale**

• A backlog of needed maintenance can build up as visitor impacts increase; this is referred to as deferred maintenance. The Prescott NF wants to work toward clearing this backlog by the percentages shown. The slower progress toward improving trail maintenance is due to a need for development of a comprehensive trail plan in several areas of the Prescott NF. Once the desired locations and types of use are determined, maintenance can be better matched to the amount and type of use.

Obj-10

Develop a partnership to create and operate 1 designated target shooting area during the 10 years following plan approval. (DC-Rec-1)

## **Background and Rationale**

- The Prescott NF has a history of providing a designated target shooting opportunity operated by others through permit. Such a situation has been located west of Prescott for about 50 years, but with population expansion and developments near the range, this permit will not be reissued in the same location. Recreational target shooting is an activity that is desired by many.
- Uncontrolled recreational target shooting surfaced as a source of conflict in meetings in several locations. These conflicts include concerns for personal safety and the accumulation of trash as targets. The communities of Jerome and Castle Hot Springs referenced the need to control recreational target shooting in their community vision statements.

Obj-11

Construct or improve the facilities at 5 to 20 trailheads during the 10 years following plan approval. (<u>DC-Rec-1</u>, <u>DC-Rec-2-Trails</u>, <u>DC-Transportation and Facilities-1</u>)

- Trailheads may lack adequate signage, parking, or cause erosion from the parking area
  due to poor location or inadequate planning for drainage. Improvements to the trailheads
  and signage help to mitigate the potential for conflict among trail users by physically
  separating different user groups.
- The construction of new trailheads could reduce impacts such as soil compaction or loss of vegetation by providing adequate facilities to meet the needs of different groups.

Examples would include larger parking spots for vehicles with trailers, or hitching posts for horses.

Obj-12

Maintain 10 to 20 percent of signage annually. (<u>DC-Rec-1</u>, <u>DC-Transportation and</u> Facilities-1)

## **Background and Rationale**

 During recreation strategy meetings, people from all three zones (Verde Valley, Agua Fria/Crown King, and Prescott/Drake) consistently referred to lack of signage or lack of effective signage along trails and at trailheads. Adequate signage was deemed very important if more than one type of trail began at the same trailhead. Improved signage could lead to better managed recreation.

Obj-13

Work with partners to maintain and enhance recreational fishing opportunities in 2 lake/pond sites during the 10 years following plan approval. (DC-Aquatic-2)

#### **Background and Rationale**

• Likely locations would be Lynx Lake and Granite Basin Lake and activities could involve enhancing opportunities for shoreline fishing as well as habitat improvement activities such as lake dredging.

Obj-14

Develop 2 to 5 additional methods for providing visitor information and education during the 10 years following plan approval. (<u>DC-Rec-1</u>)

#### **Background and Rationale**

- In order to "provide sustainable and diverse recreation opportunities that consider population demographic characteristics and reflect desires of local communities," better communication with visitors and potential visitors is needed. In order to increase communication and gather feedback, the Prescott NF expects to increase and improve effectiveness of visitor contacts through multiple avenues.
- Possible methods could include, but are not limited to, increased interpretation
  opportunities, information kiosks, improved use of Web site opportunities or social
  media, and multiple languages.

Obj-15

Mark boundaries of portions of 2 to 5 designated wilderness areas where risk of motorized or mechanized access is high during the 10 years following plan approval. (DC-Wilderness-1)

### **Background and Rationale**

Wilderness boundaries are important because the wilderness experience is defined, in
part, by the type of activities and number of people that are allowed within the area. A
key aspect of this is that no mechanized use is allowed within designated wilderness
areas, including bicycles or motorized vehicles.

Protect, relocate, or rehabilitate 2 to 5 recreation areas or locations (including trails) that show evidence of resource damage during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Watershed 2 to 5, DC-Rec-1)

#### **Background and Rationale**

- The areas or locations could include (but are not limited to): (1) areas where soils are compacted and vegetation is nearly nonexistent; (2) sites or areas that are located too near streams or watercourses where visitor use adds to problems, such as streambank erosion and sedimentation; (3) areas needing treatment of invasive species along trails or within developed sites; (4) sites that are located near Southwestern Region sensitive plant species where recreation patterns lead to trampling these plants; or (5) sites that are too near cultural resource locations.
- Possible activities that could fulfill this objective include closing and rehabilitating a
  dispersed site that is located at a spring source, locating camping farther away from
  Yellow Jacket Creek, or relocating a recreation site out of the upper Verde River flood
  plain and hardening the pathway to the river to prevent streambank erosion.

Obj-17

Implement 5 to 10 management actions on trails to meet desired conditions listed as part of <u>DC-Rec-2-Trails</u> during the 10 years following plan approval.

#### **Background and Rationale**

- The Prescott NF would like to improve current trails before adding new system trails. This implies that more comprehensive trail planning needs to be completed to provide improved recreation opportunities for all.
- The Prescott National Forest provides approximately 800 miles of trails, equally divided between motorized and nonmotorized recreation opportunities. Portions of these trails receive high use, especially near the Prescott Basin. Other trails have relatively little use. Recreation managers would like to do comprehensive trail planning to determine which trails need improvement in order to provide the desired trail opportunities and attract more use, as well as which trails may not be providing the desired recreation opportunities and are not needed.
- Conflicts occur between different types of recreationists. In order to minimize these, some multiuse trails may be limited to fewer types of recreation opportunities.

#### **Watersheds**

The watersheds need for change reads as follows: "Retain or improve watershed integrity to provide desired water quality, quantity, and timing of delivery." Watershed condition is defined as the state of a watershed based upon physical and biological characteristics and processes affecting hydrologic and soil functions (FSM 2521.05). Watershed condition integrity is having all parts (soils, vegetation, streamflow, aquatic species) interacting as they should to provide healthy watershed function that produces desired water quality, quantity, and timing of delivery. The following objectives (Obj-18 through Obj-23), as well as desired conditions (chapter 2), and standards and guidelines (chapter 4) for watersheds respond to the need for change.

O	bj.	-18

Implement 20 to 50 distinct projects that improve watershed conditions within high priority watersheds during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Watershed-1 to 6</u>)

#### **Background and Rationale**

- Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.
- High priority watersheds are those identified through an interdisciplinary process that is based on resource value and estimated costs, as well as national and regional policy for watershed condition.
- Activities could include, but would not be limited to, range improvements to distribute grazing, treatments to increase vegetative ground cover, stream stabilization, and mining restoration.
- A project is defined as work that is done in one contiguous area, such as a 1,000-acre prescribed fire, fixing 0.1 mile of road to resolve a drainage problem, or the installation of 100 feet of fencing.

Obj-19

Within 1 to 5 years of detection, improve 10 to 40 percent of improperly functioning or at-risk riparian areas during the 10 years following plan approval. (DC-Watershed 2, DC Watershed-6)

#### **Background and Rationale**

- Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.
- This objective refers to riparian areas found near stream corridors or near seasonally present water.
- Properly functioning riparian areas include those that have the desired assemblages of
  vegetation, appear to be within acceptable limits for sediment deposit in flood plains, are
  not eroded or compacted due to recreation or other uses, and are able to support aquatic
  related species associated with the habitat. At-risk riparian areas are those that are
  functioning, but are experiencing influences (e.g., low flows, compaction, and nonnative
  species invasion) that could soon change them into an improperly functioning status.
- While proper functioning condition methodology is considered, other national or regional protocols to determine riparian function may be adopted.
- Activities could include, but are not limited to, vegetation reestablishment, nonnative
  invasive plant treatments, erosion control, instream habitat improvement, adjusting the
  timing and season of grazing, or fencing.

Obj-20

Maintain, repair, or relocate 20 to 100 miles of <u>National Forest System roads or trails</u> that impact watershed integrity during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Watershed-1 to 6</u>)

#### **Background and Rationale**

 Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.

- Projects could include, but are not limited to, the following activities related to roads and trails: relocation, decommissioning, recontouring, revegetating, or improving to standard.
- Adverse impacts to watershed integrity could include, but are not limited to, adding sediment to streams, damaging riparian vegetation, streambank erosion, production of gullies, and flood plain soil compaction.

Obliterate, recontour, or revegetate a minimum of 10 miles of unauthorized routes that are impacting watershed integrity during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Watershed-1 to 6, DC-Transportation and Facilities-1)

## **Background and Rationale**

- Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.
- An unauthorized route is a former road or trail that is not designated for motorized use, or a user-created route that was never designated for motorized use.
- Evidence of adverse impacts to watershed integrity include but are not limited to, directly or indirectly adding sediment to streams, damage to riparian vegetation, streambank erosion, production of gullies, or flood plain soil compaction.

Obj-22

Improve 15 to 25 stream or drainage crossings associated with roads or trails to facilitate flow and sediment transport during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Watershed-1 to 6, DC-Rec-1)

## **Background and Rationale**

- Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.
- Examples of activities that could be done to fulfill this objective include ensuring that culvert sizes match what is needed to handle flood flows and avoid washouts that deposit road material into a stream, adjusting culvert height to ensure aquatic species are not prevented from moving along the stream, or installing drainage structures across roads where needed.

Obj-23

Maintain or enhance 25 to 55 groundwater dependent ecosystem sites (e.g., seeps and springs) during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Watershed-6</u>)

- Macroinvertebrates are the management indicator species (MIS) associated with aquatic and riparian habitat. This objective will improve habitat for this MIS.
- Groundwater dependent ecosystem sites include seeps and springs where groundwater
  emerges at the ground surface. They serve as habitat to sustain a variety of plant and
  animal species. Emergent riparian areas within these systems typically include a
  combination of sedge species, cattails, bull rushes, and various forbs or woody species.

- Animals, both wildlife and livestock, are attracted to these water sources. Sometimes the spring source is fenced and a portion of the flowing water is piped to a trough a distance from the spring.
- Motorized travel within groundwater dependent ecosystems can cause soil compaction, disturbance to vegetation, or interruption of waterflow. Travel in these locations would generally be restricted.
- Types of activities that could be completed to fulfill this objective include relocation or closure of designated roads or trails, or obliteration of illegal routes that are located too near a spring or seep. Maintaining or improving fencing around groundwater dependent systems, pasture rotation, or seasonal grazing use could also be applied.

## **Aquatic and Terrestrial Wildlife Habitat**

The need for change related to aquatic habitats states: "Provide desired habitat for native fish species." The following objectives, along with desired conditions (chapter 2), and standards and guidelines for vegetation, terrestrial wildlife habitat, and aquatic habitat (chapter 4) are intended to respond to the need for change and Federal requirements.

Obj-24

Restore native fish species to 2 to 3 stream reaches during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Wildlife-1 to 2</u>, <u>DC-Watershed-2</u>, <u>DC-Watershed-6</u>, <u>DC-Aquatic-1</u>)

- Possible locations for restoration of native species include reaches along the upper Verde River as well as portions of Sycamore Creek, downstream from Pine Mountain Wilderness.
- While the Forest Service manages habitat, work that directly changes fish populations or species composition is achieved in collaboration with the Arizona Game and Fish Department. In addition, any work involving federally listed threatened or endangered fish species could only proceed via consultation with the U.S. Fish and Wildlife Service. Therefore, any direct removal or transplant of fish species would need to be accomplished as a partnership effort with the agencies listed and others.
- Aquatic and riparian species that would benefit from work on the upper Verde River include:
  - Razorback sucker (federally listed as endangered), spikedace (federally listed as threatened), and Mexican gartersnake (candidate species to be federally listed as endangered or threatened).
  - Southwestern Region sensitive species include: lowland leopard frog, Arizona toad, desert sucker, Sonora sucker, roundtail chub, longfin dace, and narrow-headed garter snake.

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Ob	j-	25

Modify or remove at least 3 to 5 miles of fence to facilitate pronghorn antelope movement during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Wildlife-1</u>)

#### **Background and Rationale**

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- Pronghorn are highly dependent on moving long distances in order to retain genetic diversity and to escape predators. Fences can be modified to allow pronghorn to pass under them. A possible location where fence modification is needed is along the southwest corner of Yavapai Ranch.

# Obj-26

Treat 15,000 to 90,000 acres to increase pronghorn antelope habitat quantity and quality during the 10 years following plan approval. (<u>DC-Ecosystem Resilience-1</u>, <u>DC-Veg-6</u>, <u>DC-Veg-21</u>, <u>Obj-1 to 3</u>)

## **Background and Rationale**

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- Arizona Game and Fish Department pronghorn habitat evaluations (Ockenfels et al., 1996a and 1996b) indicate that the grasslands are shrub invaded and lack species richness. Shrub diversity in the open woodland areas is good, although most are so tall that they obstruct pronghorn vision and favor predation of pronghorn. The evaluation further suggests that juniper and tall shrub encroachment has reduced the amount of open grassland, and these areas would benefit from removal of juniper and shrubs. The Central Arizona Grasslands Conservation Strategy is an ongoing interagency effort to prioritize and fund grassland restoration projects in the central Arizona landscape and may be used to determine areas needing treatment.
- Prescribed burning, mechanical tree removal, or other treatments included as part of objectives 1, 2 and 3 may help to fulfill the intent of this objective.

Obj-27

Treat two to three areas to facilitate pronghorn migration during the 10 years following plan approval. (DC-Ecosystem Resilience-1, DC-Wildlife-1)

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- The importance of pronghorn migration is referenced in Arizona Game and Fish Department, Game Management Unit plans. Doing this habitat improvement activity focuses on providing open habitat that allows pronghorn to avoid predators and move across the landscape. An example of one area is the ½ to ½-mile-wide corridor along Forest Road 677.
- Prescribed burning, mechanical tree removal, or other treatments included as part of objectives 1, 2, and 3 are expected to help fulfill this objective.

Improve 3 to 15 water developments for wildlife during the 10 years following plan approval. (DC-Ecosystem Resilience-1)

## **Background and Rationale**

- Pronghorn are the management indicator species (MIS) associated with the grassland PNVTs. This objective will improve habitat for this MIS.
- While the Forest Service manages habitat, work that directly changes wildlife populations
  or species composition is achieved in collaboration with the Arizona Game and Fish
  Department.
- Water developments are structures that provide sources of water for wildlife that inhabit
  the area. Trick tanks are a type of water development that catch precipitation and direct it
  to a storage tank. From the storage tank, the water is distributed to drinking troughs for
  wildlife use.

## **Open Space, Land Adjustment, and Scenic Values**

The need for change related to open space states: "Enhance the value of open space provided by the Prescott NF by defining the visual character within areas near or viewed by those in local communities." This can be done by maintaining the visual and "wild" character of Prescott NF lands within the viewshed or within and near communities. In addition, during land adjustment activities, open space and scenic quality are considered to be a community need.

Obj-29

Act on up to 10 opportunities, as presented and feasible, to acquire lands within selected areas in the Verde Valley, along both the middle and upper Verde River, and in other portions of the Prescott NF to retain open space values and protect and enhance riparian habitat during the 10 years following plan approval. (DC-Aquatic-1, DC-Open Space-1 to 2, DC-VV MA-1.)

## **Background and Rationale**

- Open space is an important factor in the Verde Valley as evidenced by the following excerpts from the "Verde Valley Regional Land Use Plan" (Yavapai County, 2006):
  - "Open space is possibly the most prized asset of the Verde Valley region's residents."
  - "Concerns include...preventing the loss of openness, which epitomizes the sense of place in the Verde Valley."
- The Verde Valley Land Preservation Institute has produced maps of areas where retaining or adding to public land ownership is desired.
- Opportunities may exist for extending the Verde Greenway along the Verde River.

Riparian and aquatic habitats are highly valued for their wildlife, recreation, and scenic benefit.